

Remarks

The Present Invention and the Pending Claims

The present invention relates to a sanitizer composition having improved surface retention. The composition contains an organic peracid antimicrobial agent (such as peracetic acid), and a retention aid. The retention aid comprises at least one surfactant and a biopolymer thickening agent, especially a polysaccharide or a heteropolysaccharide.

Claims 37-53 are currently pending. Minor amendments have been made in claim 52 for clarification. Claim 46 has been rewritten in independent form and claim 47 has been made dependent on claim 46. Reconsideration and allowance of the pending claims is respectfully requested.

Response to rejections

Obviousness type double patenting

Claims 37-53 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 and 31-35 of U.S. Patent No. 6,828,294, in view of Hei (US 6,663,902) for the reasons set forth in the earlier Office Action.

As indicated in the response to the earlier Office Action, the present application is a divisional of application 10/213,027 which issued as US 6,828,294. The Examiner indicated that a review of the parent application shows no evidence of a restriction requirement. Such a requirement was made by telephone by Examiner Petruncio. The pending claims were cancelled from the parent application in the course of a series of telephonic contacts on or about the Thanksgiving holiday weekend of 2003. Applicants' internal record (copy attached as Exhibit A) includes a December 4, 2003 memorandum to the file regarding the Examiner's Friday November 28, 2003 telephone message that the claimed subject matter should be restricted between two groups as follows:

- Group I- Claims 1-36 -- the retention aid is a surfactant combination;
- Group II- Claims 37-52 -- where the retention aid is a biopolymer.

The file memo further indicates that Applicants' attorney left a phone message with the Examiner on December 2, 2003 traversing the restriction requirement and provisionally electing to prosecute the claims of Group I. The Notice of Allowance contained an Examiner's amendment cancelling the Group II claims. The Examiner's Amendment acknowledged authorization to cancel these claims and amend claim 23 in elected Group I was given in a December 5, 2003 telephone interview and noted the applicant's reservation of a right "to file a continuing application(s) to inventive subject matter cancelled pursuant to this amendment." Significantly, the parent case issued without any art rejections being raised or addressed.

The parent case contains no record of the reason for cancelling the Group II claims. The only reason that makes sense, in the absence of a record of an Office Action on the merits or otherwise, is that a restriction was required.

The instant application is entitled to status as a divisional continuing application and applicants ask for reconsideration on this matter. In every respect except receiving a written confirmation of the telephonic restriction of the parent application, this application has been treated by both the USPTO and applicants as a properly filed divisional of Application 10/213, 027, now issued as US 6,828,294. See the reference inserted in the present application by Applicant's Preliminary Amendment filed with the present application. All correspondence has referred to this application as a divisional.

Accordingly, Applicants submit that a restriction requirement and an election were properly made telephonically. The record supports Applicants' position that the claims of the parent case were restricted by the Examiner and the double patenting rejection in the instant application should be withdrawn.

Regardless of the disposition of the pending double patenting rejection, the '294 patent can not be considered prior art to the pending application given the common ownership and the common earliest effective filing date. Thus, only US 6,663,902 (Hei; Method and Composition for the Generation of Chlorine Dioxide Using Iodo-Compounds, and Methods of Use) remains as art applied in this rejection for obviousness.

A patent claim is obvious, and thus invalid, when the differences between the claimed invention and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 USC § 103; *See also Graham v. John Deere Co.*, 383 US 1 (1966). The basic analysis is to assess (1) the scope and content of the prior art; (2) the level of skill of a person of ordinary skill in the art; (3) the differences between the claimed invention and the teachings of the prior art; and (4) the extent of any objective indicia of non-obviousness.

Therefore, the relevant question is not, 'was a composition having thickeners and an antimicrobial agent obvious in light of the '902 disclosure'? Instead, the relevant question is 'did '902 make obvious the use of peracids instead of iodo-compounds with thickening agents'?

The antimicrobial agents at issue are distinct. Hei '902 discloses a biocidal composition, designed to generate chlorine dioxide, comprising at least one iodo-compound having at least one iodine atom and a source of chlorite ions.

The claimed invention specifically encompasses an organic peracid antimicrobial agent and a retention aid comprising a biopolymer thickening agent and at least one surfactant.

The pending claims do not include an iodo-compound as a biocidal compound. The '902 reference does not disclose the use of peracids as a biocidal compound.

The '902 disclosure does teach an optional use of thickeners with an iodo-compound. However, the referenced art also cautions that "[A]ll thickeners do not work with equal effectiveness in this [iodo-compound] invention (col. 8, lines 61-62)". If it can not be assumed that any given thickener will be necessarily successful when used with iodo-compounds, then there is no basis for assuming success when the underlying antimicrobial agent is a peracid. Thus, '902, teaching as it does away from the claimed invention, can not be said to make obvious the use of a thickening agent with peracids. To find otherwise would be to consider less than the whole of the cited reference.

Applicants submit that claims 37-53 are not obvious over the cited reference for the reasons stated above. Applicants respectfully request reconsideration and withdrawal of the rejection.

Rejection under 35 USC 103

Claims 37-45 and 48-50 were rejected under 35 USC 103(a) as being unpatentable over Dankowski *et al.* (US Patent No. 4,879,057, hereinafter "Dankowski" or '057). The Examiner recognized that "Dankowski, however, fails to specifically disclose a suspension comprising peroxydicarboxylic acid and xanthan thickener in amounts as those recited and the ratio of the anionic and nonionic surfactant as those recited". In spite of this the Examiner concluded that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions". The Examiner cites no teaching in Dankowski or elsewhere that would suggest or motivate anyone to make such an optimization.

A patent claim is obvious, and thus invalid, when the differences between the claimed invention and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 USC § 103; *See also Graham v. John Deere Co.*, 383 US 1 (1966). The basic analysis is to assess (1) the scope and content of the prior art; (2) the level of skill of a person of ordinary skill in the art; (3) the differences between the claimed invention and the teachings of the prior art; and (4) the extent of any objective indicia of non-obviousness.

All of the limitations of the pending claims did not exist in the prior art. Dankowski discloses bleaching agent suspensions, of pourable to pasty consistency, comprising:

- a) a carrier liquid thickened with selected polysaccharides;
- b) a water-soluble peroxydicarboxylic acid, preferably a diperoxydicarboxylic acid, which has 8 to 18 carbon atoms hydrophilized in the presence of a strong acid, and with a pH between approximately 1 and 6.

Applicants claims are directed to a sanitizer composition with improved surface retention comprising an organic peracid antimicrobial agent and a retention aid comprising a biopolymer thickening agent and at least one surfactant. The composition has a viscosity of about 3 cP to about 15000 cP at 23 °C, permitting the formation of films and foams with improved surface retention times. The composition contains biopolymers and surfactants that reduce the surface tension of the sanitizer composition to below the critical surface tension of the surface to which the sanitizer will be applied, increase the viscosity of the sanitizer composition without producing a gel, and produce a stable foam.

The claimed composition is not an optimized embodiment of the Dankowski composition which, as indicated above, is a bleaching agent suspension having a pourable to pasty consistency.

Claims 46 and 47 were not rejected as obvious from Dankowski. Applicants have rewritten these claims in a form in which they should clearly be allowable.

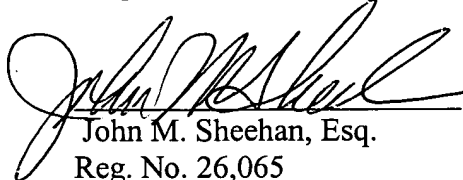
Additional Information

Applicants note that the parent case '924 was accorded a Patent Term Adjustment of 215 days. The term of the instant case, barring term adjustments specific to its own prosecution, will expire twenty years after its 2 August 2002 effective filing date, i.e., 215 days before the expiration of its parent case.

Conclusion

Applicant respectfully requests that a Notice of Allowance be issued in this application. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of this application, the Examiner is requested to call the undersigned.

Respectfully submitted,



John M. Sheehan, Esq.

Reg. No. 26,065

Phone: (215) 299-6966

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Correspondence address:

Patent Administrator
FMC Corporation
1735 Market Street
Philadelphia, PA 19103




Law Department
Philadelphia

Interoffice

To: File

Date: December 4, 2003

From: John M. Sheehan 

Subject: 60264-USA
Title: High Retention Sanitizer Systems

Examiner John Petruncio (703-308-9442) left a message on Friday, November 28 in connection with this application.

The Examiner had a restriction requirement between the following groups:

Group I – Claims 1-36 - the retention aid is a surfactant combination.

Group II – Claims 37-52 – where the retention aid is a biopolymer.

I called him on December 2 and left a message traversing the requirement and provisionally electing to prosecute the claims of Group I.

JMS/bc